

Upper Pit Disadvantaged Communities' Human Right to Water and Drought Sustainability Projects
North Cal-Neva Resource Conservation and Development Council, Inc.

Attachment 4 – Budget: Project Budget

Information is included below for Projects 1, 2, 3, with a project budget first, followed by no more than two pages of budget description. The project-specific information in this attachment (1 of 2) is followed by a proposal budget summary table (in attachment 4, 2 of 2).

Project 1 – Project Budget					
Proposal Title: <u>Upper Pit River Disadvantaged Communities' Human Right to Water and Drought Sustainability Projects</u>					
Project Title: <u>Grant Administration</u>					
Project serves a need of a DAC?: Yes					
Funding Match Waiver request?: Yes					
Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
(a)	Direct Project Administration	\$32,200.00	\$-	\$-	\$32,200.00
(b)	Land Purchase/Easement	\$-	\$-	\$-	\$-
(c)	Planning/Design/Engineering/ Environmental Documentation	\$-	\$-	\$-	\$-
(d)	Construction/Implementation	\$-	\$-	\$-	\$-
(e)	Grand Total (Sum rows (a) through (d) for each column)	\$32,200.00	\$-	\$-	\$32,200.00
*List sources of funding: <i>No match required or provided.</i>					

BUDGET SUMMARY

Project 1: Grant Administration

The grant request is for \$32,200.

This project qualifies for the DAC waiver, and thus none is provided.

Category (a): Direct Project Administration

This task includes:

- **Grant preparation:** The grant package was prepared by Forsgren Associates, Inc. who, upon award of this package, may bill up to \$11,040 for their services between July 1 and August 7, 2015. Maps were prepared by Vestra who, upon award of this package, may bill up to \$1,000 for their services between July 30 and August 7, 2015.
- **Grant program management:** This will be provided by the North Cal-Neva Resource Conservation and Development Council (RC&D). RC&D hours will all be billed at \$60/hour. This work includes:
 - 40 hours for contract coordination with project sponsors and DWR
 - And initial 16 hours, and then 16 hours/ month for 12 months to support working with the DWR grant manager to refine the invoice and report template, and then complete monthly invoices and reports, submit to DWR, and track and process payments back to project sponsors. (208 hours total.)
 - 8 hours/month for 6 months to coordinate, facilitate, and track project sponsor meetings and information outlay to RWMG members and other interested parties. (48 hours total.)
 - Coordination of timeline/schedule, permitting and other regulatory requirements, and confirmation of monthly progress with project sponsors at 2 hours/ month for 12 months. (24 hours total.)
- **Equipment for the office and field:** These are budgeted for \$200/month over 12 months (\$2,400 total), and will include a cellphone, computer, copying expenses, mailing expenses and other standard business expenses.

Project 2 – Project Budget					
Proposal Title: Upper Pit River Disadvantaged Communities' Human Right to Water and Drought Sustainability Projects Project Title: Pit River Streambank Stabilization and Riparian Restoration with Floodplain Enhancement Project Project serves a need of a DAC?: Yes Funding Match Waiver request?: Yes					
Category		(a) Requested Grant Amount	(b) Cost Share: Non-State Fund Source* (Funding Match)	(c) Cost Share: Other State Fund Source*	(d) Total Cost
(a)	Direct Project Administration				
Task 1	Project Management	8,700			8,700
Task 2	Labor Compliance	1,500			1,500
Task 3	Reporting	4,000			4,000
(b)	Land Purchase/Easement				0
Task 4	N/A				0
(c)	Planning/Design/Engineering/Environmental Documentation				0

Task 5	Feasibility review, evaluate goals and objectives compatibility with IRWM plan		5,000		5,000
Task 6	Preliminary project plans with needed reports	9,000			9,000
Task 7	CEQA Documentation	0	5,000		5,000
Task 8	Permitting	9,000			9,000
Task 9	Final Design & field survey	10,800	5,000		15,800
Task 10	Project Performance Monitoring Plan with initial monitoring	5,400			5,400
(d)	Construction/Implementation				0
Task 11	Contract Services	7,200			7,200
Task 12	Construction Administration	10,800			10,800
Task 13	Construction/Implementation activities				0
Task 13 (a)	Mobilization and Demobilization, final clean including weed control to be completed following spring season	19,800			19,800
Task 13 (b)	Fence Construction and Materials	23,400	36,000		59,400
Task 13 (c)	Equipment and material for construction of specified rock and earth moving restoration treatments	172,400	61,000		233,400
Task 13 (d)	Field Crew and supplies to complete work on specified vegetative restoration treatments.	46,500	8,000		54,500
(e)	Grand Total (Sum rows (a) through (d) for each column)	328,500	120,000		448,500
*List sources of funding: Task 4 - NRCS and Modoc RCD; Task 6 - Modoc RCD; Task 8 - NRCS and Modoc RCD;					
Task 13(b) - NRCS and landowner cost share fence project completed in 2014					
Task 13(c) - NRCS and landowner bank excavation and rock rip-rap project completed in 2014-15					
Task 13(d) - NRCS and landowner cost-share vegetative planting project completed in 2015					

BUDGET SUMMARY

Project 2: Pit River Streambank Stabilization and Riparian Restoration with Floodplain Enchantment Project

The following Project Cost Formula was developed by a civil engineer to provide a guide for budget development in civil engineering projects. All projects are a little different in their needs. However, this Budget Cost Formula provides a reasonable guide to the industry standard. The BEC stands for the basic construction expense, the project stripped down to just the basic construction expense for on the ground work. The proposed total project estimate was based on a similar project completed as a cost share project with the land owner and NRCS. This project is located within the proposed project boundaries and was completed in 2014. This project will be used as part of the cost match and makes up approximately 25% of the proposed project. This project was completed at an expense of \$76,000 without the administrative, planning, design, engineering, and environmental cost being included. The Project Cost Formula is used to illustrate the reasonable and standard cost for this type of project.

Project Cost Formula

Administration (8% BCE) Design (8-12% BCE), Design During Construction (2-4% BCE), Environmental Clearance (4% BCE), Construction Management (13-15% BCE), Construction Change Orders (10% BCE), Construction Cost (BCE)

Category (a): Direct Project Administration

Project cost formula - Administration (8% BCE) (8%), $262,100 \times .08 = 20,968$.

Budget tasks 1, 2, 3 and 4 = 14,200

Task 1 – Project Management is based on \$20/hr for 45 days; Grant Preparation cost based on pre-work estimate of \$1500.

Task 2 - Labor compliance

Task 3 – Reporting cost based on previous grants administration.

The estimated costs associated with the tasks 1, 2, 3 and are based on staff experience with previous grant administration. These costs are reasonable and typical for costs associated with this level of administration and are in line with the typical project cost formula we are using to compare reasonable costs.

Category (b): Land Purchase/Easement

Task 4 - Not applicable; all projects take place on ranches and farms with willing land-owners.

Category (c): Planning/Design/Engineering/Environmental Documentation

Project cost formula - Design (8-12% BCE) Environmental Clearance (4% BCE), (Permitting 4 % of BCE) (12%), $262,100 \times .16 = 41,936$

Budget tasks – 5-10 = 49,200

Task 5 -Feasibility review, evaluate goals and objectives compatibility with IRWM plan, Project is complete and is based on estimated time spent by members of the review team.. Estimated cost is used as a match

Task 6 - Preliminary project plans with needed report updates. Cost data is based on estimated efforts to update reports. Cost based on 100 hours per report at \$45/hr

Task 7 - CEQA Documentation cost is based on 18 days at \$45/hr. funded with matching cost.

Task 8 – Permitting cost is based on providing applications for 3 permits at \$35/hr/200 hr. = \$7000 plus \$2000 misc. permit costs.

Task 9 - Final Design & field survey cost is based on use of two people with average cost of \$30ea/hr/20days = \$9,600. Time needed based on previous experience.

Task 10 - Project Performance Monitoring Plan with initial monitoring cost is based on Project Coordinator at \$35/hr/170 hrs.

The planning and design costs associated with tasks 5, 6, 7, and 8 were developed with consultation between Central Modoc RCD and the National Resource Conservation Service. The NRCS will provide assistance with finalizing the planning and engineering for the proposed project. The costs developed are consistent with that agency's guidelines. The cost estimates for tasks 9 and 10 under this category was developed by Central Modoc RCD staff. The estimate is based on previous staff experience in similar project implementation.

Category (d): Construction/Implementation

Project cost formula - Construction Management (13-15% BCE), (13%) 262,100 x .13 = 34,073

Budget tasks 11 and 12 = 18,000

Task 11 - Contract Services cost based on Project Coordinator \$35/hr./150 hrs = \$5,250 plus misc costs

Task 12 - Construction Administration cost based on Project Coordinator at \$35/hr/300 hrs.

Task 13(a) - Mobilization and Demobilization, final clean-up including weed control to be completed following spring season. Estimated cost for weed control - \$2500; estimated cost for transport of equipment and materials to project locations - \$7,000; estimated clean-up and transport of equipment from job site - \$10,300

Task 13(b) - Fence Construction and Materials cost estimate for materials 2.25/foot/5000 ft= \$11,250; cost estimate for construction 2.15/ft/5000ft = \$10,750 plus 1400 misc.

Task 13(c) - Equipment and material for construction of specified rock and earth moving restoration treatments;

Equipment for construction contract (excavator, dumb truck, front-end loader etc.) estimated 84,600; rock (various sizes) approx, 500 cu yds 54,500; material 33,300.

Task 13(d) - Field Crew and supplies to complete work on specified vegetative restoration treatments. 4-person crew estimated at 185/day/165 days = \$30,500; pick-up, water pump for stinger estimated \$6,000; and material (seed, shrubs, mulch etc,) 10,000.

The cost of construction materials is based on contacting local vendors for a range in costs of estimated materials. Equipment and labor costs were based on local knowledge of people familiar with this type of work. This included local land owners involved in the project, local equipment operators and NRCS guidelines for similar work.

Project 3 – Project Budget					
Proposal Title: <u>Upper Pit River Disadvantaged Communities' Human Right to Water and Drought Sustainability Projects</u>					
Project Title: <u>Fall River RCD / Pit RCD Open Ditch Conversion Water Conservation / Water Supply DAC Projects</u>					
Project serves a need of a DAC?: Yes					
Funding Match Waiver request?: Yes					
Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
(a)	Direct Project Administration				
	Grand Administration (NCNRC&D)	28,145			28,145

	Contractual/Personnel: Project Director, 200 hrs x \$100.00	20,000			20,000
	Contractual/personnel: Science/Advisor/Monitoring, 50 hrs x \$100.00	5,000			5,000
	Agreement Administration 25 hrs x \$100.00	2,500			2,500
	Invoicing, Pit Resource RCD 286 hrs x \$35.00	10,000			10,000
	Progress Reports and Project Completion Report(s) 25 hrs x \$100.00	2,500			2,500
	Labor Compliance 25 hrs x \$100.00	2,500			2,500
	Equipment + supplies for office	2,400			2,400
	Grant application: fees charged by consultant 120 hrs x \$50.00	6,000			6,000
	Land Acquisition; n/a				
	Feasibility Studies, complete, NRCS match		5,000		5,000
	Final engineering report submitted		2,500		2,500
	Photographic deliverables submitted	5,000			5,000
(b)	Land Purchase/Easement				
	Four projects on private property, N/A				
	Fifth project has conservation easement in place w/ neighbor				
(c)	Planning/Design/Engineering/Environmental Documentation				
	CEQA/NEPA complete; in kind / N/A				
	Other permits in place				
	Project Performance Monitoring Plan, Proposed, 25 hrs x \$100.00	2,500			2,500
	Project Performance Monitoring Plan, Completed, 25 hrs x \$100.00	2,500			2,500
	Planning + Design, NRCS in kind 40 hours x \$50.00 per hour		2,000		2,000
(d)	Construction/Implementation				

	Burney Creek Open Ditch Conversion				
	Materials, including 10" & 12" pipe for 9500 feet	52,000			52,000.00
	Landowner, in kind; \$50.00 for value of backhoe use for 40 hrs		2,000		2,000
	Contractor Selection, construction admin, construction activities	65,000			65,000
	NRCS construction inspection, in kind, 8 hours x \$50.00 per hour		400		400
	Pit River Open Ditch Conversion				
	Materials, including 24" & 18" pipe for 2400 feet	40,000.00			40,000
	Landowner, in kind; \$50.00 for value of backhoe use for 40 hrs		2,000		2,000
	Contractor Selection, construction admin, construction activities	20,000			20,000
	NRCS construction inspection, in kind, 8 hours x \$50.00 per hour		400		400
	Pit River Tailwater and Water Conservation Project				
	Materials, including 18" pipe for 5400 feet	85,000			85,000
	Landowner, in kind; \$50.00 for value of backhoe use for 40 hrs		2,000		2,000
	Contractor Selection, construction admin, construction activities	35,000			35,000
	NRCS construction inspection, in kind, 8 hours x \$50.00 per hour		400		400
	Completed work on Pit River Open Ditch Conversion		169,122		169,122
	Taylor Creek Open Ditch Conversion				
	Materials, including 18" pipe for 5600	85,000			85,000
	Landowner, in kind; \$50.00 for value of backhoe use for 40 hrs		2,000		2,000
	Construction activities	35,000			35,000

	NRCS construction inspection, in kind, 8 hours x \$50.00 per hour		400		400
	Willow Creek Open Ditch Conversion				
	Materials, including 15" for 5700 feet	55,000			55,000
	Construction/Implementation				
	Landowner, in kind; \$50.00 for value of backhoe use for 40 hrs		2,000		2,000
	Construction activities	30,000			30,000
	NRCS construction inspection, in kind, 8 hours x \$50.00 per hour		400		400
	Grand Total (Sum rows (a) through (d) for each column)	591,045	190,622		781,667
	<p><i>*List sources of funding: Use as much space as required</i></p> <p>Match from landowners: At each of our 5 sites, we anticipate the use of a backhoe as a loaner from our land-owners. Market value is \$50.00 an hour x 40 hours per site. This comes to \$2000.00 per site for a <u>total in-kind match of \$10,000.00.</u></p> <p>Match from NRCS: NRCS will provide final planning + design, for 40 hours x \$50.00 per hour, <u>coming to \$2000.00.</u> NRCS will provide access to completed feasibility studies and final engineering report; coming to <u>\$5000 and \$2500 each, respectively.</u> NRCS will do construction inspection at each of 5 sites for 8 hours x \$50.00 per hour. This comes to \$400.00 per site, x 5 makes for a <u>total of \$2000.00.</u> NRCS completed a component of this project at another Pit River watershed/riparian property. <u>Total value of the completed project comes to \$169,122.00.</u> This is a part of the IRWM plan and was completed within the time parameters of permissible match. <u>Total federal match comes to \$180,622.</u></p>				

BUDGET SUMMARY

Project 3: Fall River Resource Conservation District / Pit Resource Conservation District Open Ditch Conversion Water Conservation / Water Supply DAC Projects

The grant request is for \$591,045.00 with an in-kind / cash match of \$190,622.00.

As a DAC project, there is an additional 25% match. Total project cost is \$781,677.00.

Category (a): Direct Project Administration

Project and Contractor Management will be provided by the Fall River Resource Conservation District to the amount of \$20,000.00 including labor compliance and progress reports, with an additional \$5,000.00 for science / monitoring efforts; this work is billed at \$100.00 an hour for 200 hours for

the project / contractor management phase and \$100.00 an hour for science / monitoring efforts for a total of 50 hours. Progress reports, final reports are at \$2500 and labor compliance is at \$2500, each assuming 25 hours work at \$100.00 an hour. Administration and invoicing will be provided by the Pit Resource Conservation District Business Manager for 5 projects at 12 hours per month x 6 months at \$35.00 an hour for \$10,000.00 for 286 hours, or 48 hours for 6 months. Equipment for the office and field are budgeted for \$2,400.00 and may include a cellphone, computer, copying expenses, mailing expenses and other standard office related items. An environmental consultant has been hired to help write the grant for the amount of \$6000.00 at \$50.00 an hour for 120 hours.

Category (b): Land Purchase/Easement

Not applicable; all projects take place on ranches and farms with willing land-owners.

Category (c): Planning/Design/Engineering/Environmental Documentation

The project is 60% ready to proceed and all required planning and environmental documentation are complete, while design and engineering are at 60%. The work to complete remaining design / engineering to 100% will be contributed as in kind match by NRCS to the amount of 40 hours at \$50.00 which comes to \$2000.00. If funding is received, project will be ready to proceed by the end for February 2016. As a federal agency, NRCS complies with all labor code compliance requirements and the applicability of prevailing wage laws.

Category (d): Construction/Implementation

Electrical line extension

The first phase of the project is electrical line extension; primary electrical line will be extended to the pump location in a buried trench.

Replacement of diesel motor

Only one site requires installation of a diesel motor. Budget is folded into materials / construction costs. We will not know the precise cost for the diesel motor phase of the project work until we have received bids. Estimates provided by NRCS engineer.

Pipeline installation

We will not know the precise cost for the pipeline and pump phases of the project work until we have received bids. NRCS engineer has estimated that \$185,000.00 will be necessary to complete the work and this amount includes a construction contingency amount of 10% integrated into each project budget, along with \$317,000.00 for materials to put in 28,600 feet of pipe; project will meet labor code compliance requirements and the applicability of prevailing wage laws. We will receive \$2,000.00 in kind from NRCS for construction inspection at \$50.00 an hour for 8 hours per site x 5 sites and \$10,000.00 in-kind backhoe work provided by landowners. Estimates provided by NRCS engineer with extensive experience in similar projects in the region. Project will proceed as follows: 1) break ground; 2) fill ditches as needed 3) install pump 4) install pipeline; 5) cover pipeline. The work we will complete with the requested funding will be fully functional and meet all the goals and objectives of the project. For all five open ditch conversion sites, pipeline design calls for installation of PVC pipe and associated valves and fittings. Pipeline will be installed in a buried trench during months outside of the irrigation season. At the Burney Creek Open Ditch Conversion site, 9,500 feet of 10" and 12" pipe will be installed. Materials costs are estimated at \$52,000.00 and construction costs are estimated at \$65,000.00. At the Pit River Open Ditch Conversion site, 2,400 feet of 24" & 18" pipe will be installed. Materials costs are estimated at \$40,000.00 and construction costs are estimated at \$20,000.00. At the Pit River Tailwater Open Ditch Conversion site, 5,400 feet of 18" pipe will be installed. Materials costs are estimated at \$85,000.00 and construction costs are estimated at \$35,000.00. At the Taylor Creek Open Ditch Conversion site, 5,600 feet of 18" pipe will be installed. Materials costs are estimated at \$85,000.00 and construction costs are estimated at \$35,000.00. At the Willow Creek Open Ditch Conversion site, 5,700 feet of 15" pipe will be installed. Materials costs are estimated at \$55,000.00 and construction costs are estimated at \$30,000.00. Note that a portion of the Pit River Open Ditch Conversion has already been completed and is match to the rest of the grant, to the amount of \$169,122.00; prior to January 1, 2015 but after January 1, 2011.

Monitoring

The pre and post water pumping/flow monitoring will occur during the irrigation season before the project is started and in the following season after

the work is completed. Because this project involves taking water from ditches and running this through pipes, the primary goal here to track that no leaking is happening – preventing water quality problems in the surrounding watershed and conserving water at a rate of 26%. A total of \$5,000.00 dollars has been budgeted for monitoring equipment and labor; this amount will meet data management and monitoring deliverables identified in the project justification section of the proposal, including any data sharing efforts with applicable state databases as defined by DWR.

Funding Match

The Fall River RCD Open Ditch Conversion Project includes in kind match from federal partner NRCS, which is providing planning and design work valued at \$50.00 an hour for 40 hours, making for \$2,000.00 in match. NRCS is providing construction inspection at \$50.00 an hour at 8 hours per site for 5 sites, coming to total match amount of \$2,000.00. Each landowner has committed to providing use of a backhoe; this is valued at \$2,000.00 per site at 5 sites, coming to a total of \$10,000.00. Part of the Pit River Open Ditch Conversion has already been implemented by NRCS and landowner and thus functions as cash match for the completion of the total project to the amount of \$169,122.00. The total amount of match comes to \$190,622.00, which is 31% of the total amount requested from the Department of Water Resources. Note that all projects are located with in a DAC community, providing an additional 25% in match.